

REMARKS

Examiner has rejected claim 1 under § 103 (a) as being unpatentable over the Iwahashi paper and the '434 reference. Applicants believe that claim 1 as amended and newly presented claim 2 are patentable for the following reasons:

In the applicants' invention as amended, three levels of encoding are used whereas the Iwahashi paper teaches only one level. The applicants' invention requires that the three encoding levels are fixed and are described as filters H_0 , H_1 and H_2 . The coefficients of these filters are exemplified in Figures 9A, 9B, 10A, 10B, 11A and 11B. These important coefficients clearly distinguish the applicants' invention from the combination of prior art relied upon in the Office Action. Mr. Iwahashi's paper notes that non-separable filters are not subband. Subband filters are common-used and usual ones, however applicants' idea is absolutely different. The idea is that filter is executed at once for the whole image, so it is not subband, but non-separable. Moreover the image is filtered vertically and horizontally at the same time, which is impossible for subband filters. Filter coefficients are not determined in applicants', they are predefined and given in the Figures 9-11. Quantizing is not a main thing in given the applicants' invention so any method may be used for quantizing. Applicants' invention uses scalar quantization. Mr. Ton's patent discloses frequency coefficients which are just ordered in descending order, which is a common method, but not arranged in layers. In addition, run-length and arithmetic coding are common methods as well.

Filters in the Iwahashi et al. may be of different size, whereas Applicants' filters are predefined.

In the Applicants' invention, frequency coefficients are sorted after every level of encoding. The coefficients are sorted in descending order and after that some of them which are smaller than a predefined threshold are quantized, the coefficient higher than the threshold are kept without quantization. Coefficient sorting is executed using G Filters. Threshold is predefined according to the required bit rate. The prior art reference of Iwahashi does not describe any quantizing scheme.

As a result, the applicants' invention differs significantly and in an unobvious fashion from the prior art of record and any combination thereof.

It is believed that the claim, as set forth above, complies fully with the Examiner's comments and favorable action in the form of a Notice of Allowance is respectfully urged. Should the Examiner find that any matters remain for resolution, he is respectfully requested to contact the undersigned by telephone at (206) 342-6228.

Respectfully submitted,

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